



New Insight in Catalysis and Electrocatalysis for CO₂ Conversion

Guest Editors:

**Prof. Dr. Alexandros
Katsaounis**

Department of Chemical
Engineering, University of Patras,
26504 Patras, Greece

Prof. Dr. Georgios Kyriakou

Department of Chemical
Engineering, University of Patras,
26504 Patras, Greece

Deadline for manuscript
submissions:

30 May 2024

Message from the Guest Editors

Dear Colleagues,

The continuous release of CO₂ by human activities poses a significant threat to human survival, caused by the disruption of the global climate and the upset of the carbon balance among the four biosphere reservoirs: earth, air, and water. Converting CO₂ into useful products has been considered one of the most appealing approaches to rebalancing the carbon cycle. This not only mitigates its environmental impact, but also provides a sustainable means of producing fuels and chemicals. Catalysis and electrocatalysis play pivotal roles in the field of carbon dioxide (CO₂) conversion. In this innovative approach, catalysts serve as facilitators, accelerating the conversion of carbon dioxide (CO₂) into valuable and environmentally beneficial products, such as fuels and chemicals.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the regulation of catalytic reactions and the design/innovation of catalysts for the production of value-added products using CO₂.

Prof. Dr. Alexandros Katsaounis
Prof. Dr. Georgios Kyriakou
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical
Biology and Phytochemistry,
University of Münster,
Corrensstrasse 48, D-48149
Münster, Germany

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (*Chemistry (miscellaneous)*)

Contact Us

Molecules Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](https://twitter.com/X@Molecules_MDPI)